

## (54) METHOD FOR STARTING RAW HYDROGEN MATERIAL REFORMER

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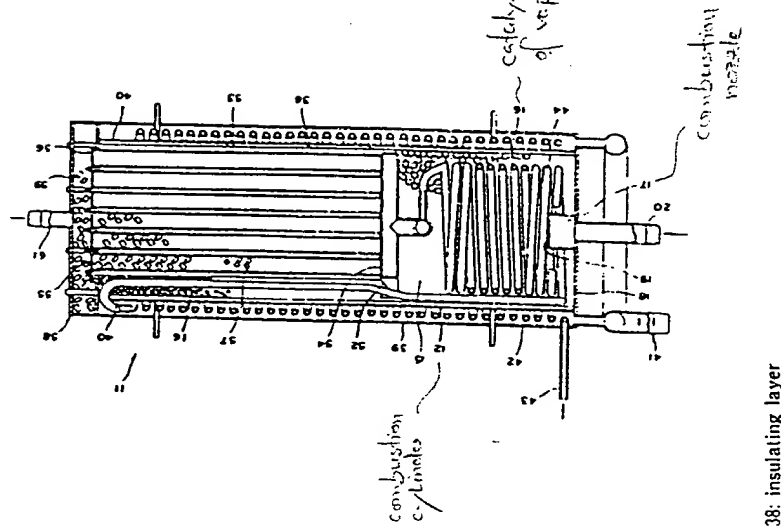
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**PURPOSE:** To evade an increase in the cost of the raw hydrogen material reformer by supplying methanol vapor and air to a combustion nozzle at the start to heat the raw hydrogen material flowing in a reformed gas generating tube by the combustion and supplying an unreacted gas to the nozzle from a fuel cell when the reforming reaction proceeds.

**CONSTITUTION:** This raw hydrogen material reformer is provided with a combustion cylinder 12 having a combustion nozzle 17 to be supplied with a gas containing the unreacted hydrogen from the hydrogen electrode of a fuel cell as a combustion gas and a reformed gas generating tube 53 set in the cylinder 12, supplied with the raw hydrogen material (from 43 and 42) from its one end and with the other end communicated with the hydrogen electrode of the fuel cell, and the raw hydrogen material in the tube 53 heated by the nozzle 17 is reformed to generate the reformed gas containing gaseous hydrogen. The following means are further added to the reformer. Namely, the vaporized methanol is supplied to the nozzle 17 along with the air at the start of the reformer, and a combustion catalyst 16 for accelerating the combustion of vaporized methanol is held in the cylinder 12.



38: insulating layer

## LEGENDE zu den Bibliographiedaten

(54) Titel der Patentanmeldung

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